



## THE OPTIMIZATION OF SOCIAL MEDIA FOR ADAPTIVE GOVERNANCE: INSTAGRAM AS A SMART GOVERNMENT INSTRUMENT IN PANEMBANGAN VILLAGE

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**Abstract.** This study critically analyzes the strategic utilization of social media optimization as an innovative instrument for Smart Government to overcome the prevalent structural digital divide in Panembangan Village and examine the associated political risks of non-institutional platform ownership. This research employed a rigorous Action Research methodology involving key village officials and youth representatives across three interwoven cycles: Diagnosis, Intervention (optimization of the official Instagram account @pemdes.panembangan), and Reflective Evaluation. Data collection utilized a mixed-method design including Focus Group Discussions (FGDs) and systematic observation. Empirical evidence confirmed a significant paradigmatic shift among stakeholders from perceiving the platform merely as digital archival to adaptive responsiveness. However, a major finding is the emergence of an informal locus of power due to individual platform ownership, which risks political contestation and public data capture. The study concludes that the optimization validates Social Media Proximity as an efficient governance heuristic, but its long-term sustainability depends critically on formalizing institutional control to ensure digital institutional sovereignty and truly adaptive local governance, thereby accelerating the fulfillment of SDGs 9, 11, and 16.s 9, 11, and 16.

**Keywords:** Smart governance, social media, Panembangan, local politic, SDGs

### 1. Introduction

The global imperative for achieving sustainable and inclusive development has placed significant focus on digital transformation, leading to the proliferation of the Smart Village framework as a necessary localization of Smart City concepts for rural economies [1]. In the context of Indonesia, where the village administrative structure “desa” is the fundamental unit of local governance, its quality and efficacy are intrinsically linked to national stability and prosperity. Therefore, the strategic implementation of robust Smart Government principles namely efficiency, accountability, and transparency facilitated by technology is a critical policy objective [2]. However, this digital transition often encounters a major challenge: the inherent structural inertia of conventional e-government models, which frequently prioritize costly, proprietary systems that ultimately fail to integrate successfully with local socio-cultural realities and prevailing media consumption patterns [3, 4].

This research identifies a critical problem gap rooted in this conventional failure. Panembangan Village, located in Banyumas Regency, serves as a compelling empirical case study demonstrating this paradox. The village exhibits strong capacity within the Smart Economy dimension, evidenced by its locally-pioneered “Mina Padi” integrated farming innovation, suggesting a high degree of local adaptive capacity and social capital. Yet,



paradoxically, its Smart Government capacity remains functionally underdeveloped [5]. Initial field diagnosis consistently revealed that formal e-government platforms, such as the village website and specialized administrative applications, suffer from symptomatic “Technical inertia”: they are characterized by infrequent updates, a lack of real-time responsiveness, and complex user interfaces that fail to meet the interactive expectations of the population [6, 7].

The consequence of this administrative failure is a profound structural digital gap. The existing government technology is critically misaligned with the community's digital consumption habits, which heavily favor ubiquitous, interactive social media platforms like Instagram [8]. For many rural communities, the mobile social media application is not merely a tool for entertainment but often the sole access point to the digital world, bypassing traditional bureaucratic channels and static government websites [9, 10]. This misalignment restricts effective public communication, inhibits administrative agility, and systematically marginalizes genuine citizen participation in local policy-making [7].

The failure of state-mandated digital infrastructure to penetrate the social and political life of the community compels local actors toward the pragmatic adoption of informal digital solutions, thereby challenging the conventional top-down model of e-government implementation [6]. This adaptive strategy, known in this research as “Social Media Proximity”, leverages the existing high platform penetration and zero-development-cost infrastructure of commercial social media platforms to deliver public services [11, 12]. The underlying assumption is that institutional innovation through strategic media repurposing offers a more equitable and sustainable path to achieving Smart Government than relying solely on costly, conventional infrastructure procurement and development.

However, the novelty of this research lies in its rigorous examination of the double-edged nature of Social Media Proximity. While the utilization of highly proximate platforms offers undeniable advantages in terms of accessibility, speed, and cost-efficiency a primary focus in most Public Service Innovation (PSI) literature this paper extends the analysis to critically investigate the “Unintended Political Consequences” of adopting non-institutional digital spaces for governmental functions [13, 14]. Specifically, the study delves into the formation of digital political capital that becomes concentrated in the hands of individual account holders, transforming the efficient governance tool into a potential venue for political contestation [15, 16]. This critical juxtaposition efficiency versus political vulnerability constitutes the core analytical contribution of this research.

Therefore, this study pursues a critical dual objective. Firstly, to analytically examine and provide empirical evidence on how the intentional optimization of ubiquitous social media platforms functions as a highly effective Public Service Innovation (PSI) to fundamentally enable adaptive and participatory governance. Secondly, and most crucially, to identify, theoretically dissect, and offer institutional solutions to the resultant political risks and tensions associated with the non-institutional platform ownership, thereby extending the framework of adaptive governance to include the imperative of digital institutional sovereignty [17]. This research ultimately argues that the long-term sustainability and accountability of the Smart Village model hinge on balancing operational efficiency with robust institutional safeguards against the capture of digital public assets.

## 2. Methods

This investigation was conducted using a rigorous action research methodology. This cyclical approach was specifically chosen because it permits the simultaneous pursuit of practical problem-solving namely, rectifying the governance communication deficit and the generation of context-specific theoretical knowledge regarding digital governance and its political implications in resource-limited settings [18]. The study was structured into three



distinct and interwoven cycles: Diagnosis and planning, intervention and execution (comprising Socialization and Training), and reflective evaluation and learning.

The study group comprised 35 key stakeholders, ensuring that the intervention permeated all layers of local administration: core village officials, administrative staff, and influential representatives from the youth organization Karang Taruna. This multi-sectoral inclusion was deliberately designed to foster a sustainable, multi-generational participatory governance framework, essential for institutionalizing change beyond the immediate intervention period. The empirical intervention focused solely on optimizing the utilization and functionality of the village's existing official Instagram account (@pemdes.panembangan). The curriculum addressed not only technical proficiencies but also core principles of good digital governance and data ethics. Data collection utilized a mixed-method design to ensure analytical robustness, integrating qualitative data (from systematic observation and structured Focus Group Discussions (FGDs) capturing attitudinal and political shifts) with quantitative data (measuring technical skill acquisition and interaction metrics), thereby offering a triangulated perspective on both functional performance and political risk [19, 20].

### 3. Results And Discussion

The analysis in this section integrates empirical findings with critical theoretical perspectives, focusing on the institutional transformation, economic efficiency, digital inclusivity, and the critical political risks inherent in the social media optimization model.

#### 3.1. The Cognitive Dimension: Catalyzing the Paradigm of Adaptive Responsiveness

The most profound and theoretically significant outcome of the intervention was the successful induction of a paradigmatic shift in the organizational mindset of Panembangan's administrative stakeholders. Analytically, the pre-intervention state of the Instagram account was definitively characterized by digital archival, operating as a retrospective, one-way repository for documenting past events, symptomatic of a bureaucratic culture utilizing technology for self-validation rather than dynamic interaction [21]. The conceptual transfer of Smart Government and citizen-centric service principles during the socialization phase, therefore, acted as a critical cognitive intervention, directly challenging this administrative status quo.

Empirical evidence from the structured FGDs provided robust confirmation of a collective, conscious transition in perception. Participants explicitly began to articulate a move away from viewing the platform as a technical tool toward recognizing it as a fundamental two-way interactive public sphere. This intellectual shift entailed accepting that public accountability and administrative efficiency are now judged by the speed, consistency, and quality of interaction, rather than simply the existence of a digital presence. This cognitive re-framing from a static, documentation-focused mindset to one of adaptive responsiveness is the primary analytical outcome, arguing that the long-term success of Smart Village implementation is intrinsically dependent on the non-technical capacity of local governance actors to embrace continuous institutional learning and responsiveness [12, 3, 8, 22].

#### Social Media Proximity: A Foundational Heuristic for Public Service Innovation (PSI)

The strategic optimization of the Instagram account is rigorously analyzed as a highly effective Public Service Innovation (PSI), governed by the heuristic of Social Media Proximity. In resource-constrained rural environments, this principle dictates that the government must strategically locate its services on platforms that demonstrate the highest existing user penetration and the lowest technological entry barrier, thereby effectively bridging the structural digital divide with minimal investment [16]. This is a necessary adaptation given the fiscal limitations typical of village administrations [4].

This pragmatic approach generates critical institutional and economic efficiencies. Firstly, the reliance on Instagram, which provides a globally established, zero-development-cost



infrastructure, allows the village to bypass the prohibitive capital expenditure and long-term maintenance liabilities associated with developing proprietary government applications. This strategic repurposing represents a fiscally responsible and highly scalable model for PSI, offering sustainability far superior to conventional, large-scale e-government projects in comparable rural settings [11, 7]. Secondly, the formalization of the Two-Way Communication Channel through the dedicated use of Direct Messenger (DM) as the official AdvoChat mechanism introduces a crucial administrative innovation. This structural adjustment systematically converts previously diffused and informal public grievances into immediate, quantifiable, and actionable administrative inputs, compelling the governance model to shift from passive service provision to active institutional engagement, thereby demanding instant accountability [9, 23].

### 3.2. Digital Adaptivity and Inclusivity in Rural Service Delivery

The implementation of the new social media strategy demonstrated a profound understanding of Digital Adaptivity, the capacity of a governing body to adjust its communication methods to align with the technological behavior of its citizens. The strategic pivot toward creating engaging, visually-driven, and FYP-optimized content (Reels/Videos) for policy dissemination fundamentally democratizes access to public information [11]. This approach bypasses common digital literacy hurdles by communicating through preferred local media formats, enhancing the inclusivity and accessibility of governance information. Furthermore, the mandatory integration of a central Linktree access point to all existing formal services (e.g., online administrative forms) simplifies the citizen journey. This ensures that the social media platform does not merely entertain, but actively serves as the user-friendly gateway to the formal Smart Government infrastructure, enhancing efficiency for both the administration and the community. This focus on simplifying the citizen-government interaction model through adaptive content strategies is key to sustainable digital inclusivity [2, 10].

### 3.3. The Informal Locus of Power: Digital Contestation and the Crisis of Institutional Sovereignty

The analysis of social media optimization, while validating its efficacy for service delivery, must be critically balanced by examining its inherent political risks, specifically concerning the control and ownership of the digital platform. The empirical observation revealed a critical vulnerability: the official village Instagram account, despite serving as a public service channel, remains technically registered under the credentials of an individual operator (non-institutional ownership). This structural anomaly transforms the platform from a neutral public sphere into a potential locus of political contestation and a repository of concentrated digital political capital.

The lack of formal institutional ownership creates significant tensions of interest that fundamentally threaten the integrity of the Smart Government model, echoing broader concerns about platform power [15, 16]. The individual account holder gains exclusive control over invaluable political intelligence comprising real-time citizen complaints (AdvoChat inputs), specific political aspirations, and unfiltered community sentiment which are highly sensitive and politically actionable [19, 24]. This information asymmetry is particularly volatile during political transitions, as the platform becomes a non-traditional weapon in political struggles. The individual's ability to selectively filter, delete, or control access to this collective data fundamentally undermines the principles of transparency and public data stewardship, creating a crisis of digital institutional sovereignty [17]. The village's digital public asset is, in effect, privatized, rendering the administrative responsiveness critically mediated by the individual's political agenda and personal loyalties, which is a significant drawback for the long-term accountability of the Adaptive Governance model [25].



### 3.4. The Institutional Nexus: Empowering Participatory Governance and Driving SDGs Achievement

Despite the political risks, the successful operationalization of this adapted social media strategy establishes a robust “Institutional Nexus” that explicitly connects local digital transformation to broader national and global development objectives. The creation of a formalized, low-barrier complaint and aspiration mechanism via Instagram directly empowers citizens, fundamentally enhancing transparency and accountability, which are foundational requirements of SDG 16 (Peace, Justice, and Strong Institutions) [1, 26]. The system reduces the perception of bureaucratic distance, fostering greater public trust [27].

Moreover, the strategic use of the platform to promote local economic and technological assets, such as the Mina Padi innovation, serves a multi-layered purpose. It amplifies local economic potential and fosters collective pride, simultaneously strengthening local social capital. By digitally framing and promoting this local innovation, the village government stimulates economic activity and demonstrates a concrete commitment to building resilient infrastructure the primary objectives of SDG 9 (Industry, Innovation, and Infrastructure)[2]. By creating an informed and digitally-engaged community capable of utilizing accessible platforms for information and feedback, the program concurrently lays the foundation for developing sustainable and inclusive local settlements, thereby aligning with SDG 11 (Sustainable Cities and Communities) [7]. Thus, the social media strategy operates as a critical, localized engine driving the achievement of the global sustainable development agenda through digital adaptation, provided the political vulnerability is addressed [4].

## 4. Conclusion

The comprehensive empirical and analytical findings of this study confirm that the strategic optimization of the Panembangan Village official Instagram account served as a highly effective Public Service Innovation, fundamentally redefining the local digital communication ecosystem. The intervention successfully induced the necessary paradigmatic shift among key stakeholders from a mindset defined by digital archival to one characterized by adaptive responsiveness. By employing the governing heuristic of Social Media Proximity, the village government effectively mitigated the pervasive structural digital divide through a fiscally sustainable and contextually relevant modality. This action not only enhanced administrative efficiency and reduced transaction costs but also actively institutionalized citizen participation, creating a formal, real-time feedback loop crucial for realizing Adaptive Governance. However, the analysis highlights a critical tension: the efficiency gained through platform proximity is critically threatened by the political vulnerability inherent in its non-institutional ownership, which creates an informal locus of power and potential for conflict. Ultimately, this research offers a validated, transferable model for other resource-constrained rural administrations seeking to meet the complex mandates of Smart Government, provided that the strategy is coupled with immediate efforts to formalize platform ownership and data stewardship to ensure truly accountable and sustainable digital governance rooted in digital institutional sovereignty.

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